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EXAMINER

PADMANABHAN, KAVITA

ART UNIT

PAPER NUMBER

2161

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/029,758

Applicant(s)

RISING ET AL.

Examiner

Kavita Padmanabhan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-108 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-108 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Claims 1-108 are pending.
2. Claims 1, 19, 37, 55, 73, and 91 have been amended.
3. Claims 1-108 are rejected.

Continued Examination Under 37 CFR 1.114

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/13/06 has been entered.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. **Claims 1-108** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a test of whether the invention is categorized as a process, machine, manufacture or composition of matter and if the invention produces a useful, concrete and tangible result. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural

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phenomena) are found to be non-statutory subject matter. For a method claim to pass muster, the recited process must produce a useful, concrete and tangible result.

In the instant case, **claims 1-36 and 55-73** recite methods and computer-readable storage mediums having executable instructions to cause a computer to perform a method, but the methods claimed do not appear to produce a useful, concrete and tangible result. For example, with respect to **claim 1**, creating sections does not appear to be a tangible result in that the sections are not used or made available for use to enable its usefulness in the disclosed practical application to be realized. **Claim 19** is similarly non-statutory. With respect to **claim 55**, extracting values does not appear to be a tangible result in that the sections are not used or made available for use to enable its usefulness in the disclosed practical application to be realized.

Claim 73 is similarly non-statutory.

Claims 37-54 and 91-108 recite systems for performing methods that do not appear to produce a tangible result for the same reasons as described with respect to claims 1 and 55.

The examiner will apply prior art to these claims as best understood, with the assumption that applicant will amend to overcome the stated 101 rejections.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. **Claims 1-5, 7-8, 10, 12-14, 16, 19-23, 25-26, 28, 30-32, 34, 37-41, 43-44, 46, 48-50, 52, 55-59, 61-62, 64, 66-68, 70, 73-77, 79-80, 82, 84-86, 88, 91-95, 97-98, 100, 102-104, and 106** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Girardot et al.** (US 6,883,137, hereinafter “Girardot”) in view of **Applicant’s Admitted Prior Art** (page 4 of applicant’s specification, hereinafter “APA”) and **Hind et al.** (US 6,904,562, hereinafter “Hind”).

In regards to **claim 1**, **Girardot** teaches a computerized method for encoding an instance document representing a content description comprising: determining a context node in the content description, the context nodes corresponding to description schemes described by the instance document (**Girardot; col. 6, lines 32-34; Fig. 1, ref character 110**), and obtaining a schema defining the attributes and elements for the context node, with the attributes and elements having an order (**Girardot; col. 4, lines 24-27, 50-52; col. 5, lines 1-2, 37; col. 6, lines 21-24, 32-34; Fig. 1, ref character 110**).

Girardot does not expressly teach the instance document describing multimedia content, the schema defining required elements and optional elements, or creating sections for required and

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optional elements and attributes. **APA** teaches an instance document describing multimedia content (**APA; p3, lines 16 – p4, line 9**) and certain elements being optional (**APA; p4, lines 1-2**). **Hind** teaches storing different types of information of the XML document in different sections of the encoded mXML document (**Hind; Fig. 4C; col. 8, lines 61-65; col. 9, line 24-64**) and also teaches a document comprising a plurality of context nodes, wherein the plurality of context nodes are represented as a plurality of data structures (**Hind; col. 3, lines 53-65; col. 8, lines 43-65**).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to utilize the instance document of Girardot as a way of describing multimedia content, as disclosed by APA, and to include optional elements, as disclosed by APA, in the schema of Girardot, to provide a standardized description of audiovisual information (**APA; p3, lines 1-5, 16-23**) and to allow greater flexibility in the schema definition (**Hind; col. 1, line 66 – col. 2, line 9**), and to store each of required elements, optional elements, required attributes, and optional attributes in specific sections of the encoded document, as suggested by Hind, to allow more efficient parsing of the document (**Hind; col. 1, line 66 – col. 2, line 9**).

In regards to **claims 2 and 7**, **Girardot, APA, and Hind** teach the computerized method of claim 1, including a section in the encoded document that indicates which elements and attributes exist in the xml document, obviously including the optional attributes and the optional elements since the entire xml document is being encoded, and this section constitutes a header in that it is located before the actual element or attribute data (**Hind; Fig. 4C; col. 11, lines 29-57**).

In regards to **claims 3 and 8, Girardot, APA, and Hind** teach the computerized method of claim 2 and 7, respectively. **Hind** further teaches using special indicator values in the encoded document in certain cases to represent processing instructions (**Hind; col. 13, lines 28-34**). **Girardot** further teaches that the order of attributes need not be strictly ordered in an xml document (**col. 4, lines 34-38**). It would have been obvious to include a special processing instruction indicator, as disclosed in Hind, to denote whether or not the attributes and elements are in the same order as listed in the schema in order to allow the encoded document to be processed more efficiently (**Hind; col. 9, lines 39-45, 57-61**).

In regards to **claims 4 and 10, Girardot, APA, and Hind** teach the computerized method of claim 1, including associating an attribute identifier with the value of each optional attribute present in the content description and associating an element identifier with the value of each optional element present in the content description (**Hind; Fig. 4C; col. 9, line 24-64**). **Hind** further teaches using special indicator values in the encoded document in certain cases to represent processing instructions (**Hind; col. 13, lines 28-34**), and including a node/element count and an attribute list in the encoded xml document (**Hind; col. 3, lines 53-60**). **Girardot** further teaches that the order of attributes need not be strictly ordered in an xml document (**col. 4, lines 34-38**). It would have been obvious to include a special processing instruction indicator, as disclosed in Hind, to denote whether or not the attributes and elements are in the same order as listed in the schema. It also would have been obvious to calculate an attribute count, using the existing attributes, and an optional elements count separate from the overall node count, using the same method used to calculate the overall node count (**Hind; col. 9, lines 57-62**) along with

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the schema definition describing which elements are optional (**Girardot; col. 4, lines 24-27, 50-52; col. 5, lines 1-2, 37**) (**APA; p4, lines 1-2**), in order to allow the encoded document to be processed more efficiently (**Hind; col. 9, lines 39-45, 57-62; col. 10, lines 4-10**).

In regards to **claim 5, Girardot, APA, and Hind** teach the computerized method of claim 1, including associating an element identifier with the value for a required element (**Hind; Fig. 4C; col. 9, lines 24-64**) if the schema defines a choice of values for the corresponding required element (**Girardot; col. 2, lines 61-64**).

In regards to **claims 12, 13, 14, and 16, Girardot, APA, and Hind** teach the computerized method of claim 1, including associating an element identifier with the value of each required attribute, associating an attribute identifier with the value of each optional attribute, associating an element identifier with the value of each required element, and associating an element identifier with the value of each optional element present in the content description (**Hind; Fig. 4C; col. 9, lines 24-64**).

Claims 19-23, 25-26, 28, 30-32, and 34 are rejected with the same rationale given for claims 1-5, 7-8, 10, 12-14, and 16, respectively.

Claims 37-41, 43-44, 46, 48-50, and 52 are rejected with the same rationale given for claims 1-5, 7-8, 10, 12-14, and 16, respectively.

In regards to **claims 55-59, 61-62, 64, 66-68, and 70**, which are directed to the reverse process, the decoding, of the method described in claims 1-5, 7-8, 10, 12-14, and 16, **Girardot, APA, and Hind** teach the computerized method of claims 1-5, 7-8, 10, 12-14, and 16. **Hind** further teaches decoding the encoded XML document using a reverse process (**Hind; Figs. 5 and 7**). Therefore, it would have been obvious to use a reverse decoding process to convert an encoded xml document into the original xml document in order to allow human-friendly viewing and editing of the document from its source file (**Hind; col. 8, lines 27-32**).

Claims 73-77, 79-80, 82, 84-86, and 88 are rejected with the same rationale given for claims 55-59, 61-62, 64, 66-68, and 70, respectively.

Claims 91-95, 97-98, 100, 102-104, and 106 are rejected with the same rationale given for claims 55-59, 61-62, 64, 66-68, and 70, respectively.

10. **Claims 6, 9, 11, 15, 17, 24, 27, 29, 33, 35, 42, 45, 47, 51, 53, 60, 63, 65, 69, 71, 78, 81, 83, 87, 89, 96, 99, 101, 105, and 107** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Girardot, APA, and Hind**, and further in view of **Li et al.** (US 6,772,180, hereinafter "Li").

In regards to **claim 6**, **Girardot, APA, and Hind** teach the computerized method of claim 1, including delimiters to indicate the start and termination of different nodes/elements and attributes (**Hind; col. 9, lines 46-61; col. 10, line 44 – col. 11, line 7; Fig. 4C**). **Girardot, APA, and Hind** do not expressly teach a schema defining boundless sequences. **Li** teaches a schema

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defining repeating elements (**Li; col. 8, lines 11-14**). Therefore it would have been obvious to use the delimiter disclosed by Hind to indicate the termination of a repeating, or boundless, element, as disclosed by Li, just as with all of the elements, in order to allow efficient processing of the encoded document (**Hind; col. 9, lines 46-61**).

In regards to **claims 9, 11, and 17, Girardot, APA, and Hind** teach the computerized method of claim 7, 10, and 16, respectively. Girardot, APA, and Hind do not expressly teach a schema defining elements with multiple occurrences. **Li** teaches a schema defining repeating elements (**Li; col. 8, lines 11-14**). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to base the xml document on a schema defining repeating elements, as disclosed by Li, which would therefore result in associating a repeat field with the value of an optional element in the encoded document, based on the teachings of Girardot, APA, and Hind, thereby indicating to the parser that an element has multiple occurrences (**Hind; col. 9, lines 39-45, 57-61**). To clarify, if an optional element has multiple occurrences, the repeat field would consist of the data values associated with every subsequent occurrence of the element after the first, in that they are repeat fields, or repeat values, of the same element type/tag and would only exist in cases where the element has multiple occurrences. However, even in this scenario, even if a value corresponds to an element that has multiple occurrences, each value would only be associated with one element identifier, since each occurrence of an element is listed individually (**Hind; Fig. 4C; lines 24-64**).

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In regards to **claim 15, Girardot, APA, and Hind** teach the computerized method of claim 14, including delimiters to indicate the start and termination of different nodes/elements and attributes (**Hind; col. 9, lines 46-61; col. 10, line 44 – col. 11, line 7; Fig. 4C**). Girardot, APA, and Hind do not expressly teach a schema defining boundless sequences. **Li** teaches a schema defining repeating elements (**Li; col. 8, lines 11-14**). Therefore it would have been obvious to use the delimiter disclosed by Hind to indicate the termination of a repeating, or boundless, element, as disclosed by Li, just as with all of the elements, in order to allow efficient processing of the encoded document (**Hind; col. 9, lines 46-61**).

Claims 24, 27, 29, 33, and 35 are rejected with the same rationale given for claims 6, 9, 11, 15, and 17, respectively.

Claims 42, 45, 47, 51, and 53 are rejected with the same rationale given for claims 6, 9, 11, 15, and 17, respectively.

In regards to **claims 60, 63, 65, 69, and 71**, which are directed to the reverse process, the decoding, of the method described in claims 6, 9, 11, 15, and 17, respectively, **Girardot, APA, Hind, and Li** teach the computerized method of claims 6, 9, 11, 15, and 17. **Hind** further teaches decoding the encoded XML document using a reverse process (**Hind; Figs. 5 and 7**). Therefore, it would have been obvious to use a reverse decoding process to convert an encoded xml document into the original xml document in order to allow human-friendly viewing and editing of the document from its source file (**Hind; col. 8, lines 27-32**).

Claims 78, 81, 83, 87, and 89 are rejected with the same rationale given for claims 60, 63, 65, 69, and 71, respectively.

Claims 96, 99, 101, 105, and 107 are rejected with the same rationale given for claims 60, 63, 65, 69, and 71, respectively.

11. **Claims 18, 36, 54, 72, 90, and 108** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Girardot, APA, and Hind**, and further in view of **Dodrill et al.** (US 6,901,431, hereinafter **Dodrill**).

In regards to **claim 18, Girardot, APA, and Hind** teach the computerized method of claim 1, including a user requesting an XML document/context node to be encoded (**Girardot; col. 6, lines 32-34**). **Girardot, APA, and Hind** do not expressly teach a reset field specifying a different context node/document to be encoded. **Dodrill** teaches a user interface with an entry box wherein the user can enter an XML file name to be processed (**Dodrill; col. 10, lines 15-17; Fig. 4**). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to allow the user to request the xml document to process, as disclosed by **Girardot**, using the entry field of **Dodrill**, in order to provide a user-friendly interface for a user to specify files to process (**Dodrill; col. 10, lines 15-17**).

Claim 36 is rejected with the same rationale given for claim 18.

Claim 54 is rejected with the same rationale given for claim 18.

In regards to **claim 72**, which is directed to the reverse process, the decoding, of the method described in claim 18, **Girardot, APA, and Hind and Dodrill** teach the computerized method of claim 18. **Hind** further teaches decoding the encoded XML document using a reverse process (**Hind; Figs. 5 and 7**). Therefore, it would have been obvious to use a reverse decoding process to convert an encoded xml document into the original xml document in order to allow human-friendly viewing and editing of the document from its source file (**Hind; col. 8, lines 27-32**).

Claim 90 is rejected with the same rationale given for claim 72.

Claim 108 is rejected with the same rationale given for claim 72.

Response to Amendments

12. Applicant's amendments filed 7/13/06 with respect to the specification and drawing objections to the have been fully considered. The objections have been withdrawn accordingly.

13. Applicant's amendments filed 7/13/06 with respect to the 35 U.S.C. 101 rejections of claims 19-36 and 73-90 have been fully considered. However, the claims do not appear to produce a tangible result and are therefore still rejected under 35 U.S.C. 101.

Response to Arguments

14. Applicant's arguments filed 7/13/06 with respect to the prior art rejections of the claims have been fully considered but they are not persuasive.

Applicant argues that at page 30 of applicant's remarks that the examiner appears to be equating the claimed encoded instance document with an XML document of Girardot and the claimed context node with a root element of Girardot, and that since an XML document can have only one root element and the claims recite a plurality of context nodes, that the XML root element and the claimed context nodes are not equivalences. The examiner respectfully disagrees with the applicant's arguments and asserts that the rejection is based on a combination of references and that the examiner is not limiting the interpretation of a context node to only a root element of an XML document. The examiner asserts that an XML document can consist of a plurality of nodes, as taught by Hind (Hind; col. 3, lines 53-65; col. 8, lines 43-65), and that the combination of references meets the limitations of the claims, as presently recited.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to combine is found not only in the knowledge generally available to one of ordinary skill in the art, but also in the references themselves (APA, p3, lines 1-5, 16-23; Hind, col. 1, line 66 – col. 2, line 9). Moreover, in response to applicant's argument that there is no support in the prior art for creating an encoded instance document in XML format, the examiner notes that the features upon which applicant relies (i.e., the encoded instance document is in binary form or in XML format) are not recited in the rejected claim(s). Although the claims

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are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The examiner asserts that the combination of references cited meets the limitations of the claims, as recited.

Applicant argues at page 32 of applicant's remarks that Dodrill does not teach reset field in an encoded instance document as claimed. The examiner respectfully disagrees with the applicant's arguments. The examiner first notes that the features upon which applicant relies (i.e., the reset field being in the encoded instance document) are not recited in the rejected claim(s). Furthermore, the In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kavita Padmanabhan** whose telephone number is **571-272-8352**. The examiner can normally be reached on Monday-Friday, 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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KP.

September 26, 2006



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PRIMARY EXAMINER